



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,791	12/06/2001	Matti Lehtimäki	915.407	9904

4955 7590 07/26/2005

WARE FRESSOLA VAN DER SLUYS &
ADOLPHSON, LLP
BRADFORD GREEN BUILDING 5
755 MAIN STREET, P O BOX 224
MONROE, CT 06468

EXAMINER

LEVITAN, DMITRY

ART UNIT PAPER NUMBER

2662

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,791

Applicant(s)

LEHTIMAKI ET AL.

Examiner

Dmitry Levitan

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Amendment, filed on 04/27/05, has been entered. Claims 1-28 remain pending.

Specification

In light of Applicant's amendment, the objection to the specification has been withdrawn.

Drawings

In light of Applicant's amendment, the objection to the drawings has been withdrawn.

Claim Objections

1. In light of Applicant's amendment, the claim objections set in the previous Office action have been withdrawn.

2. Claims 1-28 are objected to because of the following informalities:

Claims 1 and 21 limitations "access network" and core network comprising "access network control device" are unclear, because "access network control device" controls a gateway in the core network and have no relations to the access network.

Claim 6 limitation "audio and/or video data" is unclear, because it is not understood if the meaning of the claim is audio and video data or audio or video data.

Claim 27 limitations "a gateway device... having at least one access network" is unclear because it is not understood how a gateway device can have (comprise) a network. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. In light of Applicant's amendment, the claim rejections under 35 USC § 112 set in the previous Office action have been withdrawn.

4. Claims 3, 4, 19, 22 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 limitation "second interface is connected via another access network control device to said gateway device" and claim 4 limitation "second interface is connected via said access network and said first interface to said gateway device" are unclear, because an interface is known as a protocol/device interconnecting networks/devices, so connecting interface via another network or device or interface is not understood.

Claim 19 recites the limitation "access network control unit" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 22 limitation "said control information is supplied from said second interface to said access network and subsequently via said first interface with said user data to said gateway device" is unclear as written.

Claims 22 and 23 limitation "said control information is supplied from said second interface" is unclear, because it is not understood how an interface could be a source of a signal/information.

Claim Rejections - 35 USC § 102

1. Claims 1, 2, 5, 6, 10-13, 21, 27, (as understood) are rejected under 35 U.S.C. 102(e) as being anticipated by Lupien (US 6,389,008).

2. Regarding claims 1, 2, 10, 11, 21 and 27, Lupien teaches a network, a method and gateway comprising:

A telecommunication network (integrated network on Fig. 2 and 14:46-62) having at least one access network (cellular network ANSI-41 on Fig. 1 and 2, 14:28-45), a core network (packet data network 34 on Fig. 2 and 14:63-15:2), a first interface directly connected between said access network and said core network (interface between SGSN 32 and items shown in box 38: GPRS-VLR 37 and IW GPRS-BSC 39 shown on Fig. 2 and 15:21-30), and at least one terminal device (inherently part of cellular network 26 on Fig. 2),

Wherein said core network comprises at least one gateway device (SGSN 32 and GGSN 33 on Fig. 2 and 14:64-15:10), and at least one network control device (equipment identity register EIR 36 on Fig. 2 and 15:5-10, wherein EIR identifies valid mobile equipment to prevent use of lost and stolen equipment) adapted to control said at least one gateway device transmitting a control information to the gateway (inherently part of the system, because authorization of the mobile equipment is essential for the system operation),

Wherein a second interface is connected between the access network control device and the gateway device, the control information being transmitted from the access network control device and the gateway device via said second interface (Interface Gf between SGSN 32 and EIR 36 on Fig. 2); and

Art Unit: 2662

Wherein said telecommunication network is adapted to route user data directly, without being transmitted through the access network control device, between said access network and said at least one gateway device via said first interface (routing data through SGSN and GGSN to the packet data network 34 as shown on Fig. 2 and 14:67-15:4).

In addition regarding claim 21, Lupien teaches using EIR to identify valid mobile equipment to prevent use of lost and stolen equipment, wherein mobile equipment inherently transmits control information to EIR for authorization.

In addition regarding claim 27, Lupien teaches using EIR to identify valid mobile equipment to prevent use of lost and stolen equipment, wherein the gateway is inherently receiving the control information from EIR.

3. Regarding claims 5 and 6, Lupien teaches user data as real-time speech and audio (cellular based telephones, wherein data is real-time speech/voice 2:5-10).

4. Regarding claims 12 and 13, Lupien teaches the packet network as an ATM and IP network (ATM and IP networks 1:30-50).

Claim Rejections - 35 USC § 103

1. Claims 3, 4, 7-9, 14, 19, 22-25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien.

2. Regarding claim 7, Lupien teaches all the limitations of parent claims 1, 5 and 6. Lupien does not teach using RTP protocol.

Official notice is taken that RTP protocol is well known and used for real time speech transmission.

Art Unit: 2662

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using RTP protocol to the system of Lupien improve the system compatibility with devices using popular RTP protocol.

3. Regarding claims 3, 4, 23 and 24 (as understood), Lupien teaches all the limitations of parent claims 1 and 21.

Lupien does not teach using transmission network and another access network control device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using transmission network and another access network control device to the system of Lupien improve the system control by adding a local access network control device connected through a transmission network to a central access network control device, that supports the several systems.

4. Regarding claims 8, 9, 14, 24 and 25, Lupien teaches all the limitations of parent claims 1 and 21.

Lupien does not teach using ISUP, MGCP or TDM protocols for second interface.

Official notice is taken that ISUP, TDM and MGCP protocols are well known and used for transmitting data in telecommunication networks.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using ISUP, TDM or MGCP protocols to the system of Lupien to improve the system compatibility with devices using popular ISUP, TDM or MGCP protocols.

5. Regarding claim 19 (as understood), Lupien teaches all the limitations of parent claim 1.

Lupien does not teach using access network control unit being part of a Mobile Switching Center.

Art Unit: 2662

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add access network control unit to a Mobile Switching Center to reduce cost of the system by collocating access network control unit with a Mobile Switching Center.

6. Regarding claim 28 (as understood), Lupien teaches all the limitations of parent claim 27, including conversion between audio signals carried on telephone circuits and data packets carried over Internet (integrating ANSI-41 voice services with Internet 2:5-25 and 2:52-3:4).

Lupien does not teach conversion between audio signals carried on telephone circuits and data packets carried over Internet, performed at the gateway.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform conversion between audio signals carried on telephone circuits and data packets carried over Internet at the gateway, to reduce cost of the system by collocating the conversion unit with the gateway.

7. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of Zheng (US 5,745,477).

Lupien teaches all the limitations of parent claim 1, including packet networks as ATM and IP. Lupien does not teach using packet networks for transmitting control information.

Zheng teaches using packet or ATM networks for transmitting control information (using RM cells to transmit control information 2:1-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using packet networks for transmitting control information of Zheng to the system of Lupien to utilize well known control delivery method to make the system compatible with numerous available ATM and IP devices.

Art Unit: 2662

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of Admitted prior art.

Lupien teaches all the limitations of parent claim 1.

Lupien does not teach telecommunication network as UMTS network.

Admitted prior art teaches telecommunication network as UMTS network (Specification, Background of the invention, 2:3-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add new UMTS telecommunication network standard of Admitted prior art to the system of Lupien to utilize new features of well known standard.

9. Claims 20 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of UMTS 23.01 V 1.0.0 (1998-09) standard.

Lupien teaches all the limitations of parent claim 1.

Lupien does not teach using Iu as the first interface.

UMTS standard teaches using Iu interface between access and core network domains (Iu interface, shown on Fig. 1 and page 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add Iu interface of UMTS telecommunication network standard to the system of Lupien to utilize new features of well known standard and make the system compatible with other UMTS devices.

Response to Arguments

10. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dmitry Levitan
Patent Examiner.
7/22/05



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600